The Manitoba Medical Review

Vol. 24 Winnipeg, November, 1944 No. 11

Coronary Disease

By F. Gerard Allison, B.A., M.D. (Man.), M.R.C.P. (Lond.)

Most cases of Angina Pectoris are diagnosed on a history of sternal pressure pain on exertion or excitement, which may be referred to one or both arms or to the jaw. The pain is most easily induced when the stomach is full or when the patient is exposed to cold. The pain ceases on resting for a few minutes. A typical case is easily diagnosed. The causal factors in rare cases are Syphilitic Aortitis, Paroxysmal Tachycardia, Severe Anaemia, Hypoglycaemia, Aortic Valvular disease and Xanthomatosis, and an attempt should be made to exclude them. A Wasserman should always be done and the patient checked for history and cardiovascular or neurological signs of syphilis, remembering that the Wasserman is negative in 25% of cases proved at necropsy to have luetic aortitis. Gall bladder disease may co-exist with Angina. Some patients are said to be relieved of anginal pain after Cholecystectomy.

Angina Pectoris is extremely rare in women in the absence of hypertension, diabetes, or syphilis.

Pains frequently confused with angina are:

(1) Left mammary ache, lasting for hours at a time, usually over a period of years, and frequently accompanied by tenderness.

(2) Intercostal cramp, a sharp pain in the side of the chest lasting a minute or so in which any attempt to take a deep breath increases the pain.

Ruptured cervical disc or cervical spondylitis may give a confusing arm pain. The diagnosis is clear if the pain can be reproduced by movements of the neck. The scalenus anterior syndrome may also cause arm pain, which can be reproduced by heavy downward pressure on the shoulders, and relieved by shoulder elevation. Dyspepsia can usually be distinguished from angina by asking the patient if he has his post-prandial pain if he sits still. Hiatus hernia is suggested if substernal pain occurs on lying down, and may be diagnosed by X-Raying the stomach in the Trendelenberg position. Oesophageal spasm pain is worse during emotional stress, but has no relation to exertion. In difficult cases it is necessary to ask the patient to observe his pain re site, radiation, duration, effect of exercise, emotion, food and 1/100 gr. of Nitro-glycerine. Some cases of Angina have normal cardiograms. Attempts have been made to produce anginal pain showing transitory cardiographic changes by work in a cold room, inhalation of air containing 10% oxygen or even injections of Adrenalin. None of these methods are without danger, or infallible.

White[1] recently reported that the average length of life in 500 Angina patients from the onset of symptoms was nine years.

Treatment of Angina

If no causal factor can be eliminated the patient is advised to avoid physical or emotional strains which induce his attacks. He should eat small meals and rest afterwards, wear a muffler over the mouth and nose when exposed to cold, and walk slowly. If a pain occurs he should rest, and chew a 1/100 gr. tablet of Nitro-glycerine. He can also use the Nitro-glycerine prophylactically just before exertion. Weight reduction will help obese patients. He should be warned to call the doctor if a prolonged attack occurs which is not relieved by Nitro-glycerine.

Raney Sympathectomy

Intractable Angina may be treated by a Raney Sympathectomy. This operation is designed to paralyze the coronary vasomotor control, sparing the afferent pain fibers from the heart. After removal of a short length of three ribs medial to the left scapula, the sympathetic chain is identified and the preganglionic rami communicantes severed from the level of the 2nd to the 5th Thoracic inclusive. The sympathetic cord is then divided at the level of the 5th Thoracic. In 1939 Raney[2] reported eleven cases of intractable Angina relieved of their pain by operation, after observing them from 8 - 20 months post operatively. A few cases not relieved by the left sided operation were relieved by a later operation on the right side. In a recent letter he states he has now done 80 cases with two post operative deaths. A number of these cases have later had coronary occlusions and all had the typical pain.

Ten cases under my observation have had this operation performed in Winnipeg, five by W. A. McElmoyle, four by A. C. Abbott and one by O. S. Waugh. One hypertensive woman had very little post-operative disturbance, but developed a fatal cerebral haemorrhage 6 days after operation. Two cases are still convalescent from a recent operation. Of the remaining seven, whose operations were done from 48 to 10 months ago, a recent survey shows that three are completely free of cardiac pain. One patient has a slight substernal burning sensation and

slight dyspnea on severe exertion when his stomach is full, but he is able to perform many actions painlessly, which formerly distressed him. None of the three patients who still have pain have yet had a right-sided operation.

Coronary Occlusion

Coronary Occlusion pain is similar in type and distribution to that of angina but lasts from many minutes to many hours. It may be accompanied by dyspnea, ashen pallor, vomiting, sweating, fall of B.P. and elevation of pulse rate. The following day the temperature and leucocyte count are elevated. Anorexia usually lasts for the febrile period. The sedimentation rate reaches a maximum about the 4th day unless the liver engorgement of congestive failure prevents its occurrence. The sedimentation rate slowly falls to normal as the infarct heals, in about 4 - 8 weeks. The cardiograph provides confirmation in about 90% of cases. Trouble in interpretation of the tracing may be caused by pericarditis, pulmonary embolism, left ventricular strain or bundle branch block.

Although the prognosis in Coronary Occlusion is notoriously uncertain, it can be stated that recovery is very probable in cases in younger patients, in cases where the pulse rate does not rise above 100, nor the pulse pressure drop below 20, where oedema of the lungs or congestive failure do not appear and where ventricular extra systoles are absent. The latter finding has been called the mark of death, as ventricular extra systoles often lead to ventricular fibrillation.

Painless Coronary Occlusion is not uncommon. Unexplained shock, collapse, arrhythmias or dyspnea, particularly if accompanied by pulmonary oedema should suggest the advisability of a cardiogram and a later sedimentation rate. Peripheral Embolism occurs in 7% of Coronary Occlusions[3] and accounted for 12% of 66 necropsy cases of hemiplegia[4]. In many of these the Coronary Occlusion had been missed clinically, either because it was painless, because the patient could not give a history, or because the proper questions had not been asked.

Barnes[5] attributed 10% of the deaths in a series of Coronary Occlusions to pulmonary emboli from the leg vessels.

Treatment of Coronary Occlusion

Pain is relieved by morphine. A common practice is to put ½ grain morphine and 1/75 grain Atropine in a syringe and inject the solution slowly intravenously until the patient admits the pain is lessening. The needle is then withdrawn and part or all of the remainder given subcutaneously. The Atropine is to prevent vagal impulses leading to coronary constriction. In dog experiments Atropine reduced the mortality of Coronary ligation from 75% to 30%. Morphine is later repeated subcutaneously as indicated. Atropine gr. 1/150 is given 4-hourly for the first day.

Papaverine[6] is the most effective coronary vasodilator and may be given in 1 grain dosage intravenously or subcutaneously every 4 hours for the first day.

The appearance of extra systoles is treated by Quinidine gr. 5 t.i.d. as this lessens the likelihood of ventricular fibrillation[5]. Continuous oxygen, preferably by B.L.B. mask may be given, particularly if it improves cyanosis, dyspnea or tachycardia.

A fall in blood pressure lessens the work of the heart, but if it falls below 90 mm. the coronary circulation is further impaired, and slow administration of plasma or hypertonic glucose may be tried.

Anorexia persists during the febrile period after a severe attack and only fluids are required during this time. Overweight patients may be kept on a 900 calory diet during their bed rest.

The average period of bed rest after an occlusion is six weeks but this varies according to the improvement in the sedimentation rate, or complications. Leg exercises are desirable to prevent venous thrombosis and pulmonary embolism. The appearance of leg pain with Homan's[7] sign of painful dorsiflexion is an indication for heparinization or ligation of one or both femoral veins just distal to the junction with the profunda femoris[7]. Ligation with injury of the endothelium in itself causes clotting but a rapid current from the profunda and saphenous veins will help to prevent the clot extending. X-Ray visualization of the thrombus by stereoscopic plates taken during injection of the leg veins with Diodrast may be helpful in deciding whether the operation should be bilateral or whether the femoral vein itself is involved. The collateral circulation is said to be better with common iliac than with femoral ligation?

Congestive failure may be treated by cautious digitalization, remembering that Digitalis causes increase in arterial tonus, including the coronaries.

An embolus in the radial or ulnar artery recovers spontaneously, but a leg embolus needs heavy doses of Papaverine with an oral tablet of Prostigmin[8] every 3 hours, and possibly paravertebral sympathetic block with novocaine. Food, alcohol and local heat will help. Unless definite improvement occurs within 8 hours an embolectomy with heparinization should be attempted. All of six personal cases of leg embolism recovered on medical treatment.

Prophylaxis of Coronary Occlusion

Every patient in whom anginal pain has recently appeared is in danger of an occlusion, as the process is advancing. The same reasoning applies in patients whose pains are occurring on less and less exertion, particularly if attacks occur at rest. Patients of both these types should be put to bed for a week or more and investigated. Frequently a cardiogram or sedimentation rate will show an infarct which did not give typical symptoms. Papaverine may be given when it is feared that an occlusion is impending.

Any patient with coronary disease should be protected, as far as possible, against fall of blood pressure from haemorrhage, shock, or spinal anaesthesia.

♦

References

1 White, Jour. Amer. Med. Assn., 1943, 123, p. 801.
2 Raney, Jour. Amer. Med. Assn., 1939, 113, p. 1619.
3 Connor & Holt, Amer. Heart Jour., 1929-30, 5, p. 705.
4 Dozzi, Ann. Int. Med., 1939, 12, p. 1991.
5 Barnes, Pro. Mayo Clinic, 1941, 16, p. 341.
6 Lindner & Katz, J. Pharm. & Exper. Ther., 1941, 72, p. 306.
7 Homans, Surg. Gyn. Obstet., 1944, 79, p. 70.
8 Perlow, Jour. Amer. Med. Assn., 1940, 114, p. 1991.

Case Report

Acute Intestinal Obstruction

A. L. Shubin, M.D.

Mrs. T., age 46, admitted to the hospital on October 26th, 1944.

Entrance Complaint

1. Pain—Generalized, vague, crampy pains coming on periodically for a period of 10 days with no relation to meals.

2. Vomiting—At first occasionally but within the last few days more frequently with vomitus having a feculent odor.

3. Frequency for the past 14 years.

4. Nervousness and irritability.

Past History

1. Chronic constipation since 1918, resistant to laxatives and enemas.

2. Miscarriage in 1929, followed by pelvic cellulitis and menorrhagia for four months which resulted in a laparotomy being performed in Germany at that time, nature of operation unknown but probably a pelvic abscess was drained. There were no pregnancies since, although the menstrual periods continued normal and regular. Hemorrhoidectomy in 1940, with resulting incomplete stricture of the anus. In 1936 she had a similar attack of cramps in the abdomen with vomiting which lasted for two days. Since then, she has been having spells of burning pain in the abdomen and loss of appetite periodically. She has had to be very careful with her diet in order to avoid cramps.

Physical Examination

Healthy middle-aged woman who does not appear to be suffering undue pain although one has to keep in mind that she received a hypodermic injection of morphine gr. 1/4 and atropine gr. 1/150 six hours before.

Pulse, 92; temperature, 98.4; respiration, 20.

Heart and lungs negative. Blood pressure 120/78.

Abdomen appeared somewhat distended, more so in the central area; there was no definite area of tenderness and there was no rigidity. On listening to the abdomen, one could hear loud rumbling noises over the suprapubic region coincident with each bout of pain. On rectal examination, the anus was found to be tight, but the rectum was empty and there was no blood on the glove.

A flat plate of the abdomen showed some barium in the stomach and in the upper loops of the jejunum (this patient received a drink of barium several hours prior to admission). Dilated loops of small bowel in ladder fashion with fluid levels and absence of gas in the large bowel were considered as evidence of small bowel obstruction somewhere in the lower ileum (Dr. Miles). On the basis of the history of pelvic cellulitis and operative interference, physical examination and radiological findings, a diagnosis of mechanical obstruction was made. An immediate operation was not performed because of the absence of a state of shock, tenderness and rigidity. The apparent well-being of the patient made one feel sure that there was no strangulation.

Continuous duodenal intubation, suction and parenteral injection of fluids were given through the night. Re-examination in the morning revealed that her crampy pains were somewhat relieved, yet two consecutive enemas returned only slightly colored, and for that reason immediate operation was performed.

Operative Findings

A right para-umbilical incision was made and the transverse colon was found to be adherent along the entire former operative incision. When this was freed purplish distended small bowel loops presented themselves into the wound, which when followed into the pelvis seemed to be lost in a mess of adhesions. The caecum was then found and the ileum traced

into the pelvis and about six inches of small bowel was freed from a dense mass of adhesions in the pelvis, establishing continuity of the small bowel. The raw areas were covered with peritoneum and the abdomen closed.

Post Operative Course

During the first 24 hours, temperature rose to 105 and pulse 110 for no obvious reason. Intubation and fluids were continued and 100,000 units of penicillin were given. The following day, her temperature subsided and on the third day an enema was quite effectual. Since then she made an uneventful recovery and was discharged on the 12th day.

Comments

Clinically there are two types of acute intestinal obstruction:

(a) The simple type which blocks the intestinal contents, e.g., bands, foreign bodies, etc.

(b) The strangulating type which in addition to blocking the lumen interferes with the flow of the blood supply of the obstructed loop.

In the former, the level of block is the important feature, dehydration being the chief feature in high obstruction and distention in the lower type.

In the strangulating type, however, the early onset of shock and peritonitis are the important features. In this type immediate operation is essential, whereas in the simple type one can delay the operation for several hours, hoping for a cure by conservative measures.

Early diagnosis is essential; crampy colicky pain coming on in spasms is the earliest symptom of diagnostic value. (To wait for distention is to wait for the harbinger of death.)

The vague abdominal crampy pains are due to the attempt of the bowel to overcome the obstruction to the fluid, and foods by increasing the peristaltic contractions. On auscultation of the abdomen at the height of these contractions (cramps), one hears a gurgling sound which is pathognomonic of a mechanical occlusion.

Treatment

Recent interpretation of the physiology of intestinal obstruction has resulted in adjuncts to treatment which tend to reduce the appalling mortality hitherto experienced in this disease.

1. Begin intestinal intubation and suction (Wangansteen), with the object of relieving intralumenal pressure and thus obviate the compromise of the vascular supply of the bowel wall.

2. Administer oxygen in high concentration in order to diminish the gaseous intestinal distension.

3. Replace the electrolytes and fluids by whatever route available.

4. Never give a barium meal to a case of suspected intestinal obstruction.

5. Make your diagnosis early.

Clinical Luncheon Reports

St. Joseph's Hospital

Rheumatic Fever — Dr. M. Brookler

A boy of 18 was admitted to the hospital complaining of pain in the knees and ankles, epigastrium and chest for three days. This boy had two previous attacks of rheumatic fever at the ages of 11 and 14.

Temperature 100, Pulse 110, Blood pressure 115/40, Hemoglobin 62%, R.B.C. 3,160,000, Sedimentation Index plus 87. Apex impulse was in the 6th intercostal space, ½ an inch outside the nipple line, a visible and palpable thrill.

X-ray of the chest showed enlargement of the heart suggestive of a mitral lesion. Lung fields were clear.

Diagnosis — Acute rheumatic fever, acute rheumatic carditis, pericarditis with effusion.

Sodium salicylate gr xv q.i.d was given with no effect, aspirin gr x q.i.d. was started with no effect. Patient was started on Coburn's regime of 10 grams of sodium salicylate intravenously with marked improvement following the intravenous injections. A.L.S.

Ruptured Graafian Follicle — Dr. B. A. Victor

A girl aged 15 complained of pain in the right lower quadrant and nausea for one day. For about two years the patient had dysmenorrhea affecting the right side of the abdomen, at times she would get attacks of pain between menstrual periods. One week prior to admission she had pain in the right lower quadrant for two days. The day before admission she took part in physical exercises, felt sick immediately.

A diagnosis of acute appendicitis was made. Dr. W. F. Abbott operated on her. He found blood in the abdominal cavity. On inspecting the ovary he found a ruptured Graafian follicle. Suture of the Grafian follicle and appendectomy was performed.

The girl made an uneventful recovery.

A.L.S.

Victoria Hospital

Rheumatic Fever — D. A. J. Winestock

A girl aged 19 came home from work two weeks previous to admission to the hospital complaining of fever, chill and aching all over.

The elbows were aching particularly during the night. Past history was negative.

Physical examination—A pale, well developed and well nourished girl who did not appear to be very sick. Pulse 88, Temperature 99°, Blood pressure 132/88, Hemoglobin 64%, R.B.C. 4,130,000, C.I. 0.7, Achromia present, poikilocytosis slight, anisocytosis slight, microcytes present, Leucocytes 8,600, Sedimentation index plus 48.

A soft systolic murmur was heard in the mitral and aortic areas. X-ray of the chest showed diaphragm normal. The heart was generally enlarged, the transverse diameter being 17.5 cm., while the transverse diameter of the chest was 26.5 cm. Slight changes were seen in both bases, the appearance indicating congestion secondary to the heart. Lung fields otherwise clear.

The patient kept on going downhill and expired three weeks after admission to the hospital.

This case is unusually interesting because it is quite rare to find a fatality resulting from the first attack of rheumatic fever.

Dr. J. M. Lederman gave a very comprehensive report of the autopsy findings.

The pericardial cavity was markedly distended with about 200 ccs. of serious fluid containing fibrin flakes. The dilation is mainly to the left, producing partial atelectasis of the lower portion of the left lung. Parietal and visceral pericardium covered by a thick, shaggy layer of fibrin.

Heart is moderately enlarged due to dilation. the tricuspid and pulmonary valves are normal. the left auricle and left ventricle are both moderate dilated. The mitral valve shows some fibrous thickening. There were a few rheumatic vegetations along the contact margins of the cusps. The chordoe tendiniae are slightly shortened and thickened. The endocardium of the left auricle is thickened and opaque. The auricular valve cusps show marked rheumatic vegetations along the contact margins. The myocardium of the left ventricle is pale and flabby, and shows large areas of mucoid and fibrous degeneration measuring up to 1 cm. in diameter. These are most evident antero-laterally near the apex. There are scattered areas of fibrosis. The large areas resemble infarcts but the coronary arteries appear soft and normal throughout. The root of the aorta appears normal.

The pleural cavities both contain a slight excess of serous fluid. Lungs both show marked congestion and edema throughout. In addition the left lung shows partial atelectasis of the lower portion due to listended pericardium and pleural fluid.

Summary of autopsy findings:

1. Congestive heart failure.
2. Acute rheumatic pancarditis.
3. Rheumatic pericarditis with effusion.
4. Pleural effusion.
5. Congestion of lungs, kidneys and spleen.
6. Fatty degeneration of liver.
7. Edema and cyanosis.
8. Myocardial necrosis.

Conclusion—Congestive heart failure due to rheumatic pancarditis with pericardial effusion.

A.L.S.

Manitoba Medical Service Schedule of Fees Ready for Distribution

Copy of the official Fee Schedule of the Manitoba Medical Association may be obtained by any doctor in the Province of Manitoba upon application to the Secretary, 510 Medical Arts Building, Winnipeg.

Winnipeg Medical Society—Notice Board

P. H. McNULTY—*President*
A. M. GOODWIN—*Vice-Pres.*

Next Meeting
Friday, November 17th

W. F. TISDALE—*Secretary*
E. S. JAMES—*Treasurer*

Well, the good ship "W.M.S." has taken to the water for her thirty-third cruise, this time with Captain McNulty on the bridge, and the first lap of the voyage was a pleasant and successful one. We expected, and got, an overflow attendance, and the audience was as appreciative as it was large. The programme advertised in the last "Notice Board" was modified because we had an opportunity, not to be missed, of hearing from two distinguished visitors. One of these, Lt.-Col. Donald McEachern, was no stranger. He spoke upon Epilepsy and I hope to receive his paper for a future issue of the Review. The other visitor, Colonel Hurst Brown, is in charge of Medical Research in the Canadian Army and he gave an interesting talk on what his department was doing.

Of the originally planned programme, two items were given: Dr. Allison's paper and Dr. George's beautiful technicolor production of Ectopia Cordis. For the benefit of those who did not see it I'll tell you all about ectopia cordis in a few sentences. It is a definitely rare abnormality, only 55 cases having been reported since Marlborough's victory at Ramilies, i.e. 1706. It occurs in three forms, to wit: ectopia cervicalis in which the heart is in the neck; ectopia pectoris cum fissura sterni in which the heart lies upon, and not within, the chest; and ectopia abdominis when the heart becomes an abdominal organ. In the latter variety life is possible though usually for only a few years but in one case the patient, at 36, had survived four pregnancies. The usual form, of which this case was an example, is the pectoral variety. The description of one case, with minor differences, fits all. Uneventful pregnancy (apart from the frequency of prematurity) uneventful labor, the heart covered with parietal pericardium only and minus its sac, extruded through the fissured sternum and beating visibly—such is the picture. Abnormalities within the heart are invariable, most commonly septal defects. Other deformities, such as hare-lip, cleft palate, etc., are usual.

Cause? Developmental error. Treatment? None.

The November programme, as it is now planned, should be another house-packer. One of the speakers will be Mr. E. J. McMurray, K.C. He is going to deal with medicine and the law. I cannot tell you the exact title because I have not got it but I have no doubt that the talk will be interesting, instructive, and, if applied, profitable. Even the most innocent layman, and that includes our honest ingenuous selves, finds the law a mysterious disagreeable thing with toils that have at all costs to be avoided. He is asked to obey more laws than anyone can remember and probably breaks dozens of them every day without knowing about it. Perhaps Mr. McMurray seeks to remind us of our transgressions, or perhaps he will tell us how we can transgress without sinning — a paradox which a lawyer would easily solve. Anyway he'll be good, so come.

Another speaker at the November meeting will be Dr. D. J. Fraser, the presiding genius of the Workmen's Compensation Board. I read some articles written about the Board and its workings by Dr. Fraser and I read them with interest and profit. The Act is remarkably humane and its administration is at times far from easy. Dr. Fraser's chief problem, I imagine, is when to season justice with mercy and when to season mercy with justice.

It is interesting to remember that accidents seldom "just happen." Some workers have many, others have very few. There is indeed an "accident type." Such individuals usually have at least one strict parent. The members of their families have, among them, many accidents. Their marriages often end in divorce and they have few children in the group. Venereal disease is uncommon. They are usually "good fellows" very much interested in sports and they tend to over indulge in stimulants. They like to do things for themselves and consciously, or unconsciously, are in conflict with authority. Resentment or anxiety takes the mind away from the situation before them and their reaction, partly unconscious, is a "foolish" one. That is, they make a wrong movement and an accident "happens." It is estimated that 80% to 90% of accidents are "personal" that is due more to the individual than to the environment.

The Medical History Section will hold its first meeting of the season in the Medical Arts Club Rooms on Friday, November 24th, at 8:00 p.m. Dr. K. Johnston of St. Vital Sanitorium will speak upon "The Triumphs of Tuberculosis." Ken always gives a good paper and this is a good subject.

Tuberculosis has been on the rampage for a long time. The Pharaohs had experience with it and one of them had a hunch-backed little officer whose mummy showed that he had Pott's Disease. Hippocrates wrote an aphorism about it. "From the spitting of blood comes the spitting of pus." All over the world it went with crusaders, slave traders, explorers. Then, as now, it spared neither rich nor poor. Our friends overseas (by the way their Christmas parcels have been sent) may have an opportun-

ity of seeing in Florence Botticelli's painting "The Birth of Venus." His model for Venus was the "Lovely Simonetta"—a very beautiful and charming maiden of 16 whose marriage was the occasion for one of the most lavish displays of wealth ever seen in that ancient and opulent city. But, alas, the lovely Simonetta had already the finger of death upon her and within the year consumption had claimed her for its own.

Simonetta bequeathed to the world only her beauty but many other victims of the same disease left a richer legacy. John Keats died when only 23. Robert Louis Stevenson, who well knew the taste of blood in his mouth, wrote against time. The Bronte sisters, whose tales still thrill the modern movie goer, coughed up their lungs and their lives, one before she was 30, all before they were 40. It was the fire of tuberculosis that gave them that brilliant light so soon extinguished in its own flame.

I hope that Dr. Johnston will say something about Norman Bethune. There was a great man, and a great Canadian, and a great doctor. He was an artist, a poet, a chest surgeon, a soldier, an inventor and was among the pioneers of transfusions on the battlefield. Bethune's father died of tuberculosis and he himself developed the disease in an active form when he was 27. His health was restored by collapse and phrenicotomy. On the outbreak of the Spanish Civil War he went to Spain and organized a transfusion service for the Loyalists, trying to stem the lives that were ebbing away through holes torn by bullets fired by Germans and Italians. Above him, dropping bombs and, with the eye of an artist, comparing the blown-up bodies to "a budding rose unfolding," was Vittorio Mussolini, having what he called "exceptionally good fun." For hours after such a visit Bethune and his associates had no fun at all, only grim, ceaseless work for hours and even days on end. But his job was to save lives and he was working against time. He had not expected to see out '32 and here it was '37. In spite of his lungs he drove on and his lungs held out to the end for, when death came two years later in China, it came upon a bullet.

♦

Medical Events for November

Hospital Luncheons

Thursday, 2nd, 12:30 p.m., Winnipeg General Hospital.
Tuesday, 7th, 12:30 p.m., Grace Hospital.
Thursday, 9th, 12:30 p.m., St. Boniface Hospital.
Tuesday, 14th, 12:30 p.m., Misericordia Hospital
Thursday, 16th, 12:30 p.m., Winnipeg General Hospital.
Thursday, 23rd, 12:30 p.m., St. Boniface Hospital.
Friday, 24th, 12:30 p.m., Victoria Hospital.
Tuesday, 28th, 12:30 p.m., St. Joseph's Hospital.

Tumour Clinics

Winnipeg General Hospital, every Wednesday at 9:00 a.m.
St. Boniface Hospital, every Friday at 10:00 a.m.

Winnipeg Medical Society

Friday, 17th, 8:15 p.m., Medical College.

Medical History Section

Friday, 24th, 8:00 p.m., Medical Arts Club Rooms.

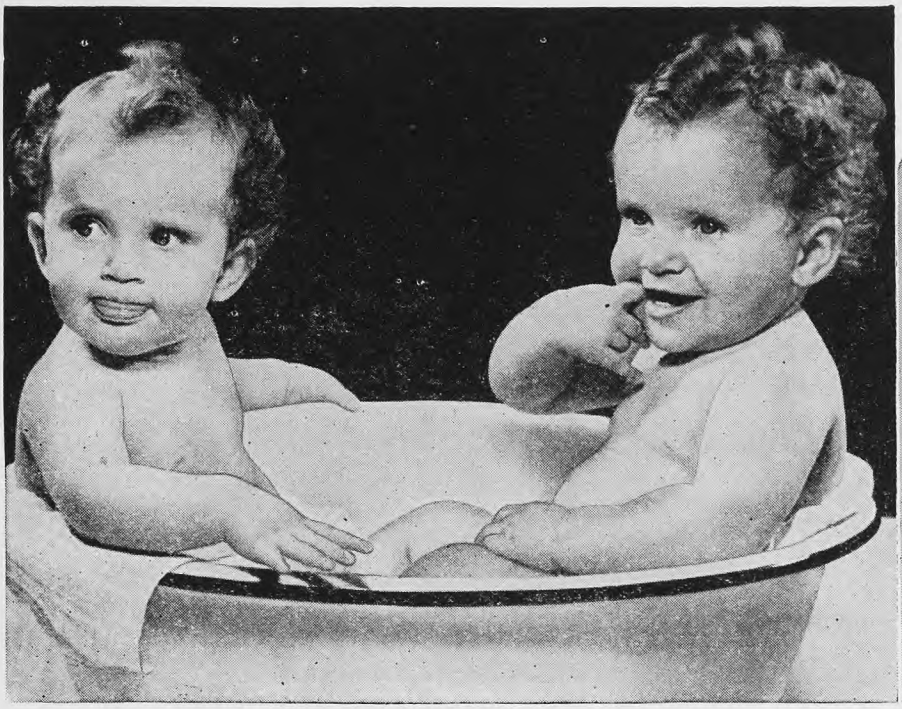
♦

Forum Meeting on Allergy

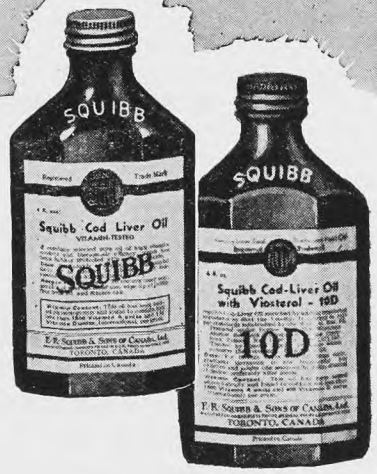
The Seventh Annual Forum on Allergy will be held in the Hotel William Penn, Pittsburgh, Pennsylvania, on Saturday and Sunday, Jan. 20-21, 1945. All reputable physicians are most welcome. They are offered an opportunity to bring themselves up to date in this rapidly advancing branch of medicine by two days of intensive post-graduate instruction. There are twelve study groups, any two of which are open to him. The study groups are arranged on the basis of previous registration. In this way, as soon as the registrations are completed, the registrant is expected to write the group leader and tell him just what questions he wants brought up in the discussion. During these two days almost every type of instructional method is employed. Special lectures by outstanding authorities, study groups, pictures, demonstrations, symposia and panel discussions.

For further information, write Jonathan Forman, M.D., Director, 956 Bryden Road, Columbus 5, Ohio.

ALIKE IN APPEARANCE — *But*



Tiny bodies, externally alike, may differ basically in their requirements of Vitamin D. That is why Squibb Cod Liver Oil comes in two potencies—Squibb Cod Liver Oil for normal babies and Squibb Cod Liver Oil with Viosterol 10D for premature or rapidly growing infants.



● Today, as in 1875, Squibb Cod Liver Oil is helping babies build strong, healthy bodies. They didn't know it then—but now most people realize that it isn't the oil itself—but the vitamin content of the oil that counts.

Squibb Cod Liver Oil is twice as rich in vitamins A and D as oils just meeting official pharmacopeia requirements. Therefore your patients have to give their babies one teaspoonful only of Squibb's daily as against two teaspoonfuls of these less potent oils.

The high quality of Squibb Cod Liver Oil is the result of careful rendering and refining of specially selected livers. Excessive heating and exposure to air is avoided and the final oil is carbonated and bottled under carbon dioxide to avoid oxidation of vitamin A.

Squibb Cod Liver Oil supplies, per gram, 1800 Int. units of vitamin A and 175 Int. units of vitamin D. It is available in 4 and 12 ounce bottles either plain or mint-flavoured. Premature or rapidly growing infants need extra vitamin D and should therefore receive Squibb Cod Liver Oil with Viosterol 10D, which contains 3000 Int. units of vitamin A and 400 Int. units of vitamin D per gram.

For literature write
E. R. Squibb & Sons of Canada Ltd.
36 Caledonia Road, Toronto, Ont.

E·R·SQUIBB & SONS OF CANADA, Ltd.
MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858

Editorial

Our plans were to use the papers given at the October meeting of the Winnipeg Medical in this issue. Of these, however, only one — Dr. Allison's — appears. We had hoped also to feature the discussions but that is not possible for this issue. Nevertheless, if any questions arise, why not send them in. It might be useful to have a "Questions and Answers" Section. In fact, now that I've mentioned it, I think it is an excellent idea. As I have said before, I want this Review to be of maximum usefulness to its readers, so how about a few questions?

♦

Congestive Failure

There are some things about heart disease that might be well said. One applies to the treatment of congestive failure. There is nothing more pitiable than the sight of a cardiac patient, slumped in bed, his head bowed, his swollen arms trying to support him, trying in vain to find a position or attitude of comfort. Bed brings no comfort to the patient with advanced failure. Left to himself he gets into a chair or kneels by his bedside with his head upon his arms. Such are the positions he instinctively adopts and for that reason they are beneficial. Not infrequently the patient who has found a little ease in a chair at home is swept into hospital and put to bed where he gets worse. To be sure, the swelling in his legs goes down but where does the fluid go? Into the veins, into the right heart, into the lungs where it stagnates, seeping into the alveoli robbing him of his air and making him cough and smother. Bed is not the place for the anasarcous.

The newer diureties have not taken away the usefulness of the older methods of treatment. Gravity is as powerful today as it was a century ago and Southey's tubes are as helpful now as they were in the time of their inventor. One or two about each ankle of the sitting patient will drain away much fluid and, if there is great ascites, paracentesis will give quick relief and comfort. Not only does the sitting position give ease but these measures will increase comfort so that rest will come for the body and also for the mind. Mercurial diureties are of the utmost value but to be effective they must lay upon the heart the load of excess fluid and upon the kidney the burden of extraordinary diuretic effort. The use of gravity and tubes spares both heart and kidneys. Then, when the bulk of the fluid has been removed, the patient will be comfortable in bed while the mercurials and other drugs remove the residue of the dropsy.

A practice which I have found very useful and which is helpful to the patient is the use of a retaining catheter during the period of diuresis after the administration of mercurial diureties. Getting on and off a bed pan many times is exhausting and annoying to the patient especially if a woman and troublesome to the nurse. The catheter, attached to a bottle by the bedside eliminates these faults and gives accurately the amount voided. The patient may even sleep during the process.

A second point in the treatment of congestive failure is fluid intake. To permit the misery of thirst, when there is already so much discomfort, is neither kind nor useful. A person, whose dry tongue is mute evidence that his craving for water is justified, should be allowed fluids to the point where his thirst is quenched. No harm can be done and much good always follows. Not infrequently the increased fluid intake will itself cause diuresis. It is sodium and not water that aggravates dropsy. The acid ash diet is very useful.

I find, generally, a great reluctance to employ Southey tubes or to give the patient much fluid. Against the one is argued the loss of protein and the risk of infection; against the other, the adding of more fluid where there is already too much. But the gain in comfort is well worth the temporary loss of a little protein and infection is never a cause for concern even if it should occur, which is very rarely. And as for fluids, the argument of a dry tongue is unanswerable.

J.C.H.

♦

Re-Establishment of Returned Members

Motion passed at Annual Meeting of Manitoba Medical Association, 1940:

"That the Manitoba Medical Association is anxious to assist in the prompt re-establishment of members of the profession who have left their practice to serve with the Army Medical Corps, and

"That if and when the medical men now serving with the Military Forces return to resume their practices, that they be invited to submit to the Association a complete list of their former regular patients. The Association in turn will undertake to notify these patients individually by mail that their former medical advisor has returned to resume his regular duties; that he is a member of the Association and is regarded as an efficient practitioner or specialist, as the case may be, and that the members of the Association at large hope that when medical attention is required that the doctor in question be called and given the opportunity to again serve his former patients."

Motion passed at Executive Meeting of Medical Association, September 12th, 1944:

"That, in addition to the provision already on record in the Minutes of Annual Meeting of 1940, to help in the re-establishment in their practice of doctors in the Armed Forces who are returning, that the Manitoba Medical Association offer to them proper advertising in the newspapers of the Province on their return."

Letters to the Editor

—

The Manitoba Medical Service

(A Criticism and a Recommendation)

By P. H. T. Thorlakson, M.D.

In the establishment of a charitable institution it has always been taken for granted that the services of the medical profession were obtainable at little or no cost. Doctors have been ready to assume responsibilities in connection with the medical aspects of these charities. As a rule, the medical services have been rendered without remuneration or there has been a token payment to cover incidental expenses. The aggregate value of such services to the community must, over a period of years, represent a very substantial contribution.

The Manitoba Medical Service is apparently based on the understanding that doctors are willing to extend their charitable services to include not only the indigents but all employed people in the community. The increased cost of medical care, which has nothing to do with an increase in medical or surgical fees (these are to be lowered below the level of twenty years ago while everything else is going up including taxes), is to be borne by the medical profession. The committee will decide how much your bill is to be discounted. Furthermore, as this scheme continues to grow and serve a larger number of citizens, the committee will take over the responsibility of supervising and controlling medical practice by scrutinizing all doctors' accounts. By reviewing the case after all tests have been completed and the results known, they will have power to disallow certain charges because, in their opinion, some of the examination and consultation might have been avoided. No other group in the community would think of thrusting themselves between the doctor and his patient to this extent and expect to get by with it.

The Association has gone into operation before many of the difficulties have been satisfactorily ironed out. At this very moment, while the public are buying the contracts, the committee is still grappling with a large number of unsolved problems. The official announcement from the committee at the recent meeting of the Manitoba Medical Association was that "a lot of these difficulties had been by-passed."

It is hard to understand why the officials of this Association or members of the Executive of the Manitoba Medical should permit this scheme to go into operation just prior to the annual meeting in September. A step of such importance deserved a full discussion by the members of the Manitoba Medical Association and their final approval should have been obtained at an annual meeting before going ahead with the plan. This procedure was urged upon the committee in a communication published in the Manitoba Review of June, 1944. One reason given for the haste in launching the plan immediately was the fear that the Dominion Government scheme of Health Insurance would make the position of the doctors untenable. Early in this year it was known that there was no reason for this fear or this haste.

The members of the profession have been told that they would be fortunate to receive, during the first two years, sixty per cent of the accepted schedule of fees. It is admitted by some that only forty per cent of the medical bills may be paid. In other words, for every $10,000 worth of medical services demanded by the policyholders within the next two years, $4,000 to $6,000 of this service will be chargeable to the medical profession as charity.

During the recent annual convention of the Manitoba Medical Association, the General Secretary, Dr. T. C. Routley, said that, in answer to lay groups who demanded the right to control any scheme of Health Insurance for the people of Canada, he would like to state emphatically that the medical profession would not tolerate any outside interference with the **medical aspects** of the plan; that they and they alone were qualified by training and experience to undertake this phase of the work. During that very hour we heard that a group of doctors, unaided by any expert with experience or special knowledge of insurance principles, were embarking upon a plan to organize a sickness insurance society. This independent step was taken in complete disregard of the fact that we have in Canada a very large and important group of men who have made a lifelong study of insurance problems.

How would the medical profession react to an announcement by the insurance companies of Canada to the effect that they would no longer require doctors to supervise the medical aspects of their insurance problems?

Many of the members of the committee are medical specialists—they all subscribe to the opinion that in a difficult medical or surgical situation, a man specially trained to deal with that problem is required. Sound principles that govern human conduct and attitudes under one set of circumstances should, with equal force, apply to others. In one of the most important steps taken by our profession in this province, no expert has been consulted and we are to be advised and governed by a group who possess little or no experience in sickness insurance.

It is understood that there are two basic requirements necessary to stabilize an insurance scheme—one is a **fund** sufficiently large to meet all normal demands upon that fund; the second is that the **annual premiums paid** for the benefits expected should be sufficient **to maintain that fund in a sound and secure position.**

If the members of the medical profession are convinced that this is a sound venture, then they should be prepared to subscribe a sufficient

sum to launch the scheme in a business-like manner. There are, no doubt, one hundred medical men in Winnipeg who have, before this, made investments of $1,000 each in a speculative venture and they would be prepared to do so again if they could be assured that the plan was a co-operative enterprise in which the public, the larger corporations, as well as municipal and city authorities, were prepared to assume some financial responsibilities for its success. No, the doctors insist on assuming the whole burden themselves and continue in a direct way to provide medical relief to a large section of the community at 50% of a reduced schedule of fees. If there is such a great demand on the part of the public for an insurance plan of this kind, then substantial support should be forthcoming to aid the medical profession to embark on such an experiment.

It should be emphasized to the public that this scheme is not organized for the benefit of the doctors—on the contrary; we can see only more trouble, more vexation, more interference with our private work, more forms to fill out and constant bickering over the proper assessment of accounts. This plan has been developed for the benefit of the public. The premium will not pay for the services that they have in the past asked for, nor for the increased demands that are anticipated in this scheme. There was a patient in my office to-day who plans to have her gallbladder operation done under this plan for the cost of her initial payment — a few dollars. She has had gallstone attacks for six years. This is an indication of what may be expected to occur in a large number of cases. I have no objection to extending charity to people in need of assistance. In fact to give freely of our time and experience to people who are critically ill but financially unable to meet the cost, is one of the privileges of our profession. However, I resent a third party dictating the terms and amount of my charitable donations.

This is a relief scheme — not an insurance plan. Furthermore, we are over-selling a hospital and medical service at the very time when hospitals and doctors are hard pressed to provide accommodation and service to those urgently needing it. Even now the members of the committee are deciding how they can reduce the payments for laboratory service to meet the limited resources of the association — and this only two months after an approved schedule of fees had been submitted by the Manitoba Medical Association and approved by the committee. There is a constant process of chiseling and avoiding proper commitments because the scheme has been improperly planned and organized. The method of dealing with difficulties, always at the expense of the doctor, will have to continue so as to prevent the organization from going bankrupt. The happy situation, from the standpoint of the policy-holder, is that the association can not fail because there is no provision in the contract to force the payment of obligations which it assumes as the intermediary between the patient and the doctor.

The financial aspect of the problem is by no means the most serious infringement upon the direct relationship between the doctor and his patient. As was indicated earlier, the Association proposes to limit the amount of investigation that may be carried out on a given case. Permission must be obtained before certain procedures can be carried out. Power to interfere and to dictate are given to Dr. Moorhead and his committee on the threat of withholding compensation for services rendered.

If the members of the medical profession of Manitoba had approved of this new departure from the usual accepted practice, and agreed that supervision of medical practice was desirable and necessary, that would be one thing — but when a group abrogate this power to themselves without proper authority and approval, then the profession should resent such intrusion into their accepted doctor-patient relationship.

These criticisms are fully justified and I believe, represent the attitude of the majority of doctors upon these matters. One must not judge their approval of the scheme by the number of physicians who have signed their contracts.

There are many commendable features in the scheme. The members of the committee have been given an arduous and, to judge from the above statements, a rather thankless task. The committee was originally authorized to canvass the local situation and to recommend and to bring before the Manitoba Medical Association a plan that would enable people in the low income group to budget for unexpected and altogether unpredictable illness. The members of the committee deserve credit for the amount of work they have done and the time and leisure that they sacrificed in developing the plan. I understand that many members of the committee admit that the scheme is not satisfactory and requires modifications and readjustments in many of its aspects.

However, the scheme has been launched by a group of doctors who feel that they have given it their best thought and consideration. The correct thing to do now is to support it, on the understanding that further study based on experience will make it possible to strengthen and consolidate the work of the committee by the introduction of sounder insurance methods.

There are five pre-requisites necessary to make any scheme of sickness insurance satisfactory to both parties and assure it of some permanency:

1. The employment of a trained actuarial expert and trained assistants to deal with all the problems that are bound to arise;

2. An insurance fund which, together with the premiums, will pay for the services that are

rendered. The advantage of having an insurance fund at the beginning is that it will serve as a barometer which will indicate very quickly the soundness of the plan;

3. An annual premium which will guarantee medical and surgical services to the purchaser when he requires them from the doctor of his choice and which will be sufficient to maintain the insurance fund in a sound position. If the premium does not maintain the fund in a sound financial position, then the purchaser must either expect to surrender some of the privileges under his policy or agree to an increase in the premium;

4. An acceptable and fair schedule of fees;

5. An independent court of appeal, the members of which are recognized consultants and are therefore qualified to arbitrate on matters that come before them. The doctor should be notified that his case is coming before the board. He should be asked to attend and to give additional information if required. His case should not be judged in absentia. The members of the board would be entitled to a fee for their services.

It should still be possible to strengthen the position of the scheme by widening responsibility and support to include employers of labour, by obtaining the services of trained experts in the field of insurance and by establishing a substantial stabilizing fund. The latter would allow fair compensation for services rendered from the beginning and act as a barometer with regard to the proper relationship between revenue from premiums and charges for medical and surgical services.

♦

Obituaries

Dr. H. H. Chown

The last leaf on the tree of the medical pioneers of the Canadian west has fallen. Dr. Henry Havelock Chown died quietly at his home in Winnipeg, October 12th, at the age of 85. Coming to Winnipeg in 1880 at the age of 21, fresh from graduation in medicine in his home university, Queen's, he resided here continuously save for a year or more of post-graduate work in London and on the continent. He came to a city which for its size, yielded to none in high quality of its medical men — James Kerr, J. Wilford Good, R. J. Blanchard, R. G. Brett and A. H. Ferguson to mention only a few, and with his adherence to Listerian principles he soon won fame as a surgeon. He successfully performed the first ovariotomy which may also have been the first planned major abdominal operation in Western Canada, and was the first to perform gastro-enterostomy in Winnipeg.

Though he thought that the founding of a medical school in Winnipeg in 1883 was premature, he became connected with it in 1885 as a teacher of anatomy and retained his active connection until 1917. From anatomy he passed to surgery and clinical surgery and served as dean of the college from 1901 to 1917. It was largely his wise statesmanship which led to Manitoba Medical College becoming in 1917 the Faculty of Medicine of the University of Manitoba. On retiring as dean, he became a member of the first Board of Governors of the University.

Next to the medical college the Winnipeg General Hospital claimed his interest. For thirty-two years he served on the honorary attending staff. House men vied with one another for the privilege of assisting a surgeon who by natural ability and thorough knowledge made the most difficult operation seem simple.

On his retirement from active practice he became medical referee of the Great West Life Assurance Company with which he had been associated from its beginning in 1892. His connection with this company continued until his death.

In his later years he travelled widely by air whenever possible, visiting Egypt, India, China, Japan, New Zealand, Australia, South Africa, Bermuda and California.

Other associations he had were with the Children's Home, 1883 to 1901; the 90th Battalion and the Children's Hospital. Keenly interested in the history of Western Canada he read a most interesting paper on the early medical men of his region before the Winnipeg Medical Society.

Honors came to him. His Alma Mater, Queen's, granted him an LL.D degree in 1903, and two years earlier he had been president of the Canadian Medical Association. In 1922 he became a Fellow of the American College of Surgeons.

He is survived by his son, Dr. Bruce Chown, pathologist to the Children's Hospital, and Chairman of the recently established Manitoba Tuberculosis Commission.

Well and wisely did Dr. Chown lay the foundations of medical education in this Canadian west.

♦

Capt. Harry Marantz

Capt. Harry Marantz, R.C.A.M.C., medical officer of the Queen's Own Cameron Highlanders, was killed in action in France, Aug. 15. After graduating from the University of Manitoba in medicine, 1931, he practiced for two years at Steinbach, then eight years at Flin Flon, Manitoba, where he was also health officer and coroner. After enlisting in July, 1941, he was stationed at M.D. 10, Winnipeg, before going overseas in May, 1942. He is survived by his widow and two children.

Personal Notes and Social News

Dr. Robert M. Ramsay, R.C.A.F., and Mrs. Ramsay celebrated the birth of a son (Robert Carlson) on September 30th, 1944, at the Winnipeg General Hospital.

♦

The sympathy of the Executive and Members of the Manitoba Medical Association is extended to Mrs. Harry Marantz, whose husband Dr. Harry Marantz, R.C.A.M.C., was killed in action overseas.

♦

Dr. R. M. Cumberland, formerly of Pine Falls, Man., has taken up practice at Kamsack, Sask.

♦

Dr. A. W. Natsuk, formerly of the Misericordia Hospital staff, has entered military service with the R.C.A.M.C.

♦

Friends of Dr. Dave Bruser, now Squadron Leader, R.C.A.F., will be glad to know that he was appointed a member of the Order of the British Empire, June, 1944. Congratulations, Dr. Bruser!

♦

Capt. Gordon C. Chown, R.C.O.C., son of Dr. Gordon Chown, after two and one-half years service overseas, was recalled from Normandy to take the Staff course at the Royal Military College, Kingston.

♦

Doctors Hugh F. Cameron, Brian D. Best and K. R. Trueman left Sunday, October 15th, to attend International Medical Assembly Convention in Chicago, Illinois.

♦

Surgeon-Captain Winston Alec Austin has been promoted to the rank of Major, according to word received by his parents, Mr. and Mrs. G. A. P. Austin, 661 Broadway, Winnipeg. Major Austin is now stationed on the 11th General Hospital staff overseas.

♦

Dr. and Mrs. Charles H. A. Walton have left for New York, where Dr. Walton will attend a series of lectures at the Roosevelt Hospital.

♦

Recipient of the Canadian Efficiency Decoration, awarded officers who have completed 20 years' efficient service, is Colonel Roy Walter Richardson. A surgeon in civilian life, Col. Richardson went overseas in January, 1940, went on strength of No. 5 General Hospital, R.C.A.M.C. His wife resides in the Royal Oaks Apts., Winnipeg.

♦

Dr. D. A. Davidson has resumed his civilian practice at Cartwright, returned from Active Service.

Premier T. C. Douglas announced the establishment of a Saskatchewan division of venereal disease control, under the direction of Capt. C. G. Sheps, Winnipeg. Dr. Sheps has been transferred by the army to Regina, and loaned to the provincial government on a part time basis to tackle the work.

♦

Dr. Morris Victor, son of Dr. B. A. Victor, who went in with the troops at Arnheim, is now reported safe. Dr. Victor's many friends rejoice with him in this good news.

♦

Dr. and Mrs. E. A. Jones, Winnipeg, have returned from a trip to Eastern Canada.

♦

Born to Dr. and Mrs. J. Brace Baker (nee Peggy Kennedy), of Brandon, Man., Oct. 14th at the Winnipeg General Hospital, a son (Brace Kennedy).

♦

Dr. F. Sedziak moved from Elm Creek to Oak River.

♦

Dr. David Braunstein moved from Rossburn to Binscarth.

♦

Two Winnipeg doctors who have been overseas nearly five years have returned home. Lieut.-Col. Cecil W. Clark and Major Cherry Bleeks, both went over with No. 5 General Hospital, R.C.A.M.C. in January, 1940. They served latterly in Sicily and Italy.

♦

Dr. T. I. Brownlee resumed civilian practice at Russell, from Active Service.

♦

Dr. John C. Elias, formerly of St. Boniface Hospital, is practicing at Carman.

♦

Major Frank Hayter, M.C., of Dieppe, and graduate of the Manitoba Medical College, returned from Overseas this morning (Oct. 26). He goes on to Toronto next week for a four months x-ray course.

♦

Dr. C. E. Baker, graduate of Manitoba University, has just returned to Winnipeg after having spent five years overseas with the 22nd Field Ambulance. He was in France in 1940 and returned to France again with the invasion troops on D-Day, when he was wounded. He also spent considerable time on the Gripsholm.

Department of Health and Public Welfare

Comparisons Communicable Diseases—Manitoba

(Whites Only)

DISEASES	1944 Sept. 10 to Oct. 7	1944 Aug. 13 to Sept. 9	1943 Sept. 12 to Oct. 9	1943 Aug. 15 to Sept. 11	TOTALS Jan. 1 to Oct. 7,'44	TOTALS Jan. 1 to Oct. 9,'43
Anterior Poliomyelitis	28	34	11	6	80	33
Chickenpox	29	29	41	15	1637	1179
Diphtheria	14	9	15	15	147	208
Diphtheria Carriers	6	1	1	1	25	20
Dysentery—Amoebic	----	----	----	1	----	7
Dysentery—Bacillary	19	16	3	3	42	16
Erysipelas	4	1	4	5	52	55
Encephalitis	1	2	2	3	9	10
Influenza	3	1	16	6	155	396
Measles	36	40	86	88	5137	2634
Measles—German	3	----	3	----	237	171
Meningococcal Meningitis	2	----	1	----	16	28
Mumps	15	8	75	54	1558	3216
Ophthalmia Neonatorum	----	----	----	----	----	----
Pneumonia—Lobar	----	2	10	5	123	144
Puerperal Fever	----	----	1	----	4	2
Scarlet Fever	62	31	83	51	1859	1092
Septic Sore Throat	----	1	1	4	22	39
Smallpox	----	----	----	----	----	----
Tetanus	----	----	----	----	1	1
Trachoma	----	----	1	----	----	4
Tuberculosis	43	32	46	41	467	460
Typhoid Fever	2	1	----	3	15	21
Typhoid Paratyphoid	----	----	----	----	----	3
Typhoid Carriers	----	----	----	1	1	2
Undulant Fever	1	----	----	1	5	9
Whooping Cough	38	28	87	75	309	1631
Gonorrhoea	126	117	137	112	1316	1300
Syphilis	53	46	43	34	510	408
Actinomycosis	----	----	----	----	2	1
Meningitis Carriers	----	----	----	----	----	6

DISEASE *Approximate Populations.	*738,000 Manitoba	*3,825,000 Ontario	*906,000 Saskatchewan	*2,972,300 Minnesota	*641,935 North Dakota
Anterior Poliomyelitis	28	70	2	156	11
Chickenpox	29	220	13	----	----
Diphtheria	14	5	7	34	12
Diphtheria Carriers	6	----	----	----	----
Dysentery—Amoebic	----	----	----	13	----
Bacillary	19	3	1	1	6
Encephalitis Epidemica	1	----	1	4	3
Erysipelas	4	7	3	----	2
German Measles	3	20	4	----	----
Influenza	3	51	----	----	8
Malaria	----	----	----	----	----
Measles	36	60	16	15	1
Meningococcal Meningitis	2	9	----	5	----
Mumps	15	112	5	----	----
Ophthalmia Neonatorum	----	----	----	----	----
Puerperal Fever	----	----	----	----	----
Scarlet Fever	62	257	10	112	13
Septic Sore Throat	----	2	----	----	----
Smallpox	----	----	----	----	----
Trachoma	----	----	----	----	2
Tuberculosis	43	171	19	13	14
Tularemia	----	----	----	1	----
Typhoid Fever	2	8	1	1	----
Typhoid Fever Carriers	----	----	----	----	----
Typhoid Para-Typhoid	----	3	1	----	----
Undulant Fever	1	2	----	19	----
Whooping Cough	38	186	62	132	33
Gonorrhoea	126	383	----	----	38
Syphilis	53	301	----	----	13

DEATHS FROM COMMUNICABLE DISEASES

August, 1944

Urban — Cancer 42, Tuberculosis 8, Syphilis 5, Pneumonia (other forms) 4, Pneumonia Lobar 2, Influenza 1, Poliomyelitis 2, Whooping Cough 1, Hodgkin's Disease 1, Septic Throat 1, Disease of Pharynx and Tonsils 1. Other deaths under 1 year 25. Other deaths over 1 year 158. Stillbirths 18. Total 269.

Rural — Cancer 25, Tuberculosis 21, Dysentery 4, Diphtheria 3, Pneumonia (other forms) 3, Lethargic Encephalitis 1, Measles 1, Puerperal Septicaemia 1, Scarlet Fever 1, Syphilis 1, Whooping Cough 1. Other deaths under 1 year 24. Other deaths over 1 year 152. Stillbirths 17. Total 255.

Indians—Pneumonia (other forms) 5, Tuberculosis 5, Measles 4, Influenza 1. Other deaths under 1 year 2. Other deaths over 1 year 3. Stillbirths 1. Total 21.

Anterior Poliomyelitis has been quite prevalent in the eastern United States this year and you will note that Minnesota reports 156 cases in this four-week period. Manitoba has had more cases than usual in non-epidemic years. In my opinion this may indicate a high morbidity rate for us in 1945.

Diphtheria is still our black mark! Fourteen cases of a preventable disease in four weeks! Load up the old syringe and shoot **toxoid** — this is the shooting season for more than ducks!

Tuberculosis, Gonorrhoea and **Syphilis** still require a major concerted effort by all to prevent and control.

Wasserman Fastness and Relapse in Early Syphilis

It appears that the great bugbear of physician and patient, the fixed or irreversible positive Wassermann reaction in treated early syphilis, lies at the door of the rest interval or lapse from treatment rather than in any peculiarity of disease or drugs.

It may be stated with positiveness that the old practice of administering treatment in early syphilis by fits and starts, conditioned on the Wassermann report of the blood, is pernicious; that even the introduction of a few weeks of complete rest from treatment into the management of the first eighteen months of the disease, is likely to be profoundly injurious; that the patient who lapses or escapes treatment during this period is his own worst enemy; and that No Rest Interval and a regime in which the patient is Constantly Receiving Either an Arsenical or a Heavy Metal during the First year of the disease or longer, if the indications require, is the best and safest modern practice both in the interest of the patient and of the public health.

The continuous method of treatment secures the reversal of the blood Wassermann reaction by the end of a year in 82%, whereas the intermittent scheme of treatment with rest intervals or lapse of a month or more secures only 37% of reversals, and irregular treatment gives only 5% of Wasserman reversals within a year.

A little treatment continuously given is more than twice as effective as when intermittently applied, and more than four times as effective as when irregularly given. However, prolongation and intensification of treatment, using much arsphenamine and much heavy metal, but especially much arsphenamine in the first three months promotes good results. Much arsphenamine and much heavy metal is four times as effective as little arsphenamine and little heavy metal. The good end results obtained by prolonging continuous treatment for more than a year, are more than double those obtained by the same kind of treatment carried through less than a year.

The Wasserman findings are an unsafe guide to the time of cessation of treatment. Treat by schedule and not by Wassermann test is the slogan in early syphilis. However, the Wassermann test should be repeatedly negative for a complete year and a C.S.F. should be negative before the cessation of treatment or any rest period is given.

The occurrence of even weak positive serologic tests among the negatives in an otherwise favorably progressing patient is a serious matter. Subsequently clinical or serologic relapse is prone to occur. Continuation and intensification of treatment is indicated.

45% of relapses occur within the first six months of the rest and observation period, 73% within the first year and 91% by the end of the second year. No promise should be made, no precautions relaxed and no observation neglected during this probationary period. Especially should pregnancy and mechanically unprotected intercourse be even more strictly controlled after than during standard treatment in early syphilis. Marriage should not be consented to under this period of probation.

Best results are obtained from Neoarsphenamine when given every five days in courses of ten, a total of almost forty injections being administered.

If Mapharsen is used in early Syphilis, it should be given twice a week in courses of twenty with a total of about sixty injections.

The interval between courses is usually eight weeks, but should be only four weeks between first and second arsenical course.

Bismuth is of course given during periods between arsenical courses, overlapping at the end and at the beginning of each arsenical course.

The Control of Infectiousness in Syphilis

Infectiousness in syphilis is a function of three factors:

(a) Time.

(b) Arsphenamine.

(c) Individual predisposition to relapse.

Infectiousness is not a function of the serologic state of the patient. No serologic test has any value as a proof of infectiousness or noninfectiousness, early or late. Syphilis treated or untreated, is most infectious early, grows less so with lapse of time, is rarely infectious (but may be so) after five years. Late syphilis and late prenatal (congenital) cases are not infectious. Therefore, one should spar for time and delay in any issue involving infectiousness, (i.e. marriage, intercourse).

Infectiousness is controlled and syphilis will be extinguished as a health problem by treatment of the infectious person. The public health responsibility of the physician is, therefore, with the early months and years of the disease.

Treatment to control infectiousness must be with the trivalent arsenicals, i.e. arsphenamine, neoarsphenamine and mapharsen. No other drugs will do. The use of trivalent arsenicals must not be delayed even to secure any minor individual immunizing advantage.

Treatment to control infectiousness must be continuous, not intermittent, and last at least 18 months. Rest periods encourage relapse.

Acetarsone (Stovarsol), tryparsamide and nonspecific (including fever) must not be expected to control infectiousness.

Search for infectious lesions is ineffective, except as an adjunct. Hence inspection of prostitutes is useless.

Instruction to and co-operation by the patient is ineffective and untrustworthy except as an adjunct.

The amount of arsenicals required is not less than 30 injections. Heavy metal is required as an adjunct.

The infectiousness of semen and vaginal secretions, even in the absence of lesions, in early and latent syphilis, demands absolute mechanical protection in intercourse, treatment or no treatment. Continence advised is seldom practised.

Inspection, instruction, control and protection are more essential in rest periods than under treatment. There is a relapsing type of early syphilis regarding which no rules or predictions can be formulated. In relapsing types, infectiousness may reappear immediately after or during (arsphenamine resistant) treatment with the arsphenamines.

Alcohol, dirt, bad hygiene, irritants including tobacco, sweat, friction, predispose to infectious lesions. The great promoter and source of infectious relapse is the Short Arsphenamine course (a few injections) unsupported by other treatment. Treatment prophylaxis (after exposure) is unreliable. If given it must be followed through.

The non-pregnant, nonsyphilitic woman should be protected mechanically and by treatment of the partner. Conception should not take place except under treatment control. The child of the pregnant syphilitic woman should not be destroyed but protected in utero by treatment of the mother, before and after conception, and of the father if syphilitic before conception.